

At Eisenhower, We've Got Your Back

Comprehensive Treatment Options For Back Pain



There is a saying that when the only tool you have is a hammer, everything looks like a nail. With Eisenhower's extensive "toolbox" of resources for treating back pain, however, desert dwellers have access to virtually every solution for back pain that is available today. From conservative therapeutic measures to the most advanced surgical techniques, it's all right here.

So, when should you see a doctor about back pain — and what kind of doctor should you see?

"If it's the first time someone is experiencing back pain, it's seldom necessary to see a specialist," says Alfred C. Shen, MD, a Board Certified Neurosurgeon at the Eisenhower Neuroscience Institute. "The majority of back pain goes away on its own, or with conservative measures such as anti-inflammatory medications, ice, heat, gentle massage and exercise. It's the back pain that doesn't go away or progressively worsens, or that is associated with a nerve deficit that causes numbness or weakness, that should be seen by a specialist."

"While two people may have the same symptom — pain — it's not necessarily caused by the same problem," explains Ali Tahmouresie, MD, a Board Certified Neurosurgeon at the Eisenhower Neuroscience Institute. "Treatment must be tailored to the individual patient's needs and lifestyle, and determining the most appropriate treatment requires a thorough evaluation."

"Each patient is like a jigsaw puzzle," Dr. Shen notes. "At an initial consultation, some of the pieces fall into place, but some are missing from the picture. We have to carefully sort through the patient's medical history and symptoms, conduct tests, and start filling in the pieces of the puzzle to come up with the right treatment plan."

"One of the diagnostic tools we have is SPECT/CT," Dr. Shen continues, referring to a state-of-the-art imaging application. "It's like Doppler radar for the spine that homes in on the 'storm center' of where the pain is coming from."

Another helpful test is called a discogram. It involves inserting a needle into a disk and injecting a small amount of dye. If the injection reproduces the patient's back pain, it's an accurate indicator of which disk is the source. Other studies may also be indicated, including electromyography (EMG) to test the electrical activity of the muscles. EMG is often performed along with a nerve conduction study that measures nerve function. In addition, a selective nerve root block can help to identify the specific damaged nerve.

While a neurosurgeon is uniquely qualified to evaluate and treat back pain, few of their patients actually undergo surgery. "Neurosurgeons don't automatically operate," Dr. Tahmouresie emphasizes. "We never do surgery as a first line of treatment unless the patient has a severe problem that may cause paralysis or limb loss, or the pain is so great that it cannot be controlled."

"For every pathology, there is a protocol and an evidence-based approach to treatment," adds Farhad M. Limonadi, MD, a Board Certified Neurosurgeon at the Eisenhower Neuroscience Institute. "Spinal surgery is an effective treatment when it is used appropriately. But, it's not right for every patient with back pain. Further, when spinal surgery is indicated, utilizing the latest techniques including minimally invasive approaches when applicable is warranted."

Back Pain Treatment Options

Conservative measures are the first line of treatment for most back pain:

Rest — Since most cases of back pain are due to muscle strain, it's important to avoid further irritation. Bed rest is fine for two or three days (prolonged bed rest can make things worse).

Anti-inflammatory medications — Help to treat pain and associated inflammation.

Heat — Applying heat can help ease discomfort due to muscle pain.

Ice — Applying ice to a strained muscle can help reduce inflammation.

Exercise — Increasing the strength and flexibility of the "core" muscles helps protect and relieve pressure on the spine. Yoga, tai chi and Pilates are some low-impact types of exercise that have been shown to be helpful.

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Massage — Can provide symptomatic relief for pain caused by muscle spasm.

If these simple measures do not resolve pain, there are further steps that can be taken under the supervision of a physician:

Physical therapy — Targeted back-strengthening exercises along with specialized modalities such as aquatic therapy, ultrasound and electrical stimulation.

Acupuncture — Several studies have found that this traditional Chinese medicine can help reduce chronic back pain and improve daily function.

Muscle relaxants — These medications can help relieve muscle spasms.

Narcotic pain medications — While these can be excellent for relieving pain, they must be taken only for a limited time since prolonged use can be dangerous and addictive.

Epidural steroid injections — X-ray guidance is used to deliver medication to the area adjacent to an inflamed spinal nerve.

When surgical intervention is deemed appropriate, a full range of today's most advanced procedures is available at Eisenhower Medical Center:

Discectomy — Surgery to remove the herniated portion of a disk to relieve nerve irritation and inflammation. This procedure may be performed minimally invasively using a special microscope to view the disk and nerves (microdiscectomy).

Foramenotomy — Decompression surgery to enlarge the passageway where a spinal nerve root exits the spinal canal (often performed as part of a discectomy).

Laminectomy — Also known as an “open decompression” and typically performed to alleviate pain caused by nerve impingement due to spinal stenosis. It involves removing the lamina (layer of bone that covers the spinal cord and nerves) of each diseased vertebra to give the nerve root more space. A laminotomy involves removing just a small portion of the lamina.

Spinal fusion — Joining two or more adjacent vertebrae with a bone graft in order to increase stability, relieve pain and prevent damage to the spinal cord.

Vertebroplasty — Performed by a neuroradiologist or surgeon, this procedure involves injecting bone cement into compressed vertebrae to help stabilize fractures and relieve pain.

Kyphoplasty — Similar to vertebroplasty, in this procedure a balloon-like device is inserted to expand compressed vertebrae before bone cement is injected

What Causes Back Pain?

Some of the most common causes of back pain:

Muscle strains and sprains — The most common cause of back pain, usually from improper lifting, poor posture, excess body weight, awkward movement.

Ruptured (or herniated) disk — A bulge in a disk (the shock-absorbing pad of tissue between each vertebra) that can press on nerves and cause pain. Radiculopathy refers to the irritation and inflammation of a nerve caused by a herniated disc.

Osteoarthritis of the spine — Breakdown of the cartilage that protects and cushions the facet joints in the spine.

Osteoporosis — Lowered bone density, especially in postmenopausal women, can lead to vertebral compression fractures.

Degenerative disk disease — Not really a disease, but a term used to describe the normal changes in the spinal disks as we age.

Spinal stenosis — Narrowing of the spinal canal (the open space in the spine through which the spinal cord passes).

Spondylolisthesis — A condition in which a vertebra in the lower spine slips forward or backward.

Kyphosis — An abnormal curvature of the upper spine.

**For more information on Eisenhower Neuroscience Institute,
call 760-837-8020.**